

net.work.Maryland

Proposal to General Assembly

Background

The Department of Budget and Management testified to the Senate and House Appropriations Committees in February 2002 on the net.work.Maryland project. DBM had paused the net.work.Maryland project to take the following steps:

1. Refine the definition and purpose of the network
2. Convene an advisory group
3. Refine scope of network
4. Evaluate technical alternatives
5. Decision Point – Recommendation for how to proceed

DBM has completed a project plan that defines the purpose and scope of the network. Work is proceeding on the implementation of a Board of Directors. DBM has identified three phases to the net.work.Maryland project.

Phase 0 – Work completed to date

Phase I – Development of statewide network backbone

Phase II – Development of regional networks

DBM recommends proceeding with Phase I of the project.

Lessons Learned

In proceeding with the project, DBM will incorporate the following lessons learned from the work completed to date:

- Separate resource share (fiber) and network projects
- Economic development must be clearly defined and articulated

- Stakeholders must remain consistently involved
- Detailed design and deployment must be regionalized
- A communications plan must be developed for customers and other stakeholders

Phase 0 (Complete March 2002)

The following work has been completed or is nearing completion:

- Central and Southern LATAs¹ connected using State Fiber (OC-48 Ring)
 - College Park POP
 - 6 St. Paul, Baltimore POP
- Annapolis Metropolitan Area Network (MAN)
- Gateway Equipment in Garrett County
- SMTP Email Relay with AntiVirus Capability
- Connectivity for UMES
- Planning for fiber-based network:
 - Purchased fiber to use for spurs
 - Bay Bridge engineering and design
 - Engineering tools to develop Configuration Management application
 - Network Management and Accounting Tools.

Amount Spent: \$18,954,628

Phase I (3/1/02 – 10/30/02)

The following steps will be completed for Phase I:

¹ Local Access and Transport Area is a U.S. term that refers to a geographic region assigned to one or more telephone companies for providing communication services. A connection between two telephone companies within the same region is referred to as intraLATA. A connection between two local exchange carriers in different regions is called interLATA, which is the same as long-distance service. Provisions guiding the use of LATAs are outlined in the Telecommunications Act of 1996.

1. The Board of Directors will be implemented and the Board will be involved in all major project decisions.
2. A dedicated Project Management Office will be implemented.
3. An inventory of state leased circuits will be completed.
4. Statewide interLATA connections will be completed taking into consideration existing leased circuits and internet access (ISP) will be implemented in each of the 4 LATA's and Cecil County. (Maryland is comprised of 4 local access transport areas (LATA's) and Cecil County. These LATA's are in the western, southern, central, and eastern shore parts of the state.)
5. Statewide telecommunications requirements will be clearly documented.
6. A communications plan will be implemented to ensure customers will understand the benefit of the network and how to access it.

The FY 03 costs for Phase I are:

Capital	\$3,835,000
Reimbursable	\$3,268,000
General Fund	\$2,000,000
 Total	 \$9,103,000

The benefits for Phase I include:

- Stakeholders in all 4 LATA's and Cecil County will have access to faster service at less cost by November 2002.
- All stakeholders will be represented in the decision process.
- State agencies can save money by consolidating networks.
- There will be a potential for economic benefit through:

- (1) All areas throughout the state will have access to a statewide telecommunications infrastructure. For example, remote areas of the state may be viewed as more desirable because the library and education facilities have better telecommunications access.
- (2) Due to increased access in areas by the public sector served by net.work.Maryland, many of the private carriers may see incentives to provide better services at affordable prices to private sector interests.

Phase II and Beyond (11/1/02 - ?)

The following steps will be completed in Phase II in FY 03:

1. User activity and telecommunications traffic patterns will be identified.
2. A determination will be made whether to build or buy more network capability. Regional solutions can be implemented by reviewing all technical alternatives for providing network access and bandwidth.

The capital and reimbursable costs for Phase II for FY 04 and beyond are to be determined.

Questions

What will the State have when Phase I is complete?

Using leased circuits and State owned fiber; the initial net.work.Maryland backbone will be complete statewide. Users throughout the state will have access to a POP within their LATA that is part of the net.work.Maryland backbone. Cross LATA communications costs throughout the state will be "*postalized*", i.e. all users to net.work.Maryland will pay the same for interLATA costs, regardless of location. Since commodity Internet service will be available within each LATA, there are three paths an organization will take:

- Between themselves
- Between themselves and the internet
- Between themselves and a net.work.Maryland partner in education, government, libraries, hospitals, etc.

I was promised a POP in my County. Why will it not matter if I don't have one in my County?

Currently, each organization is responsible for the cost of building and maintaining their individual organization's network. This will remain unchanged. When an organization wants to connect their network to net.work.Maryland, they will contact their local exchange company (LEC) to lease a circuit. The LEC will provision a circuit from their network to the net.work.Maryland POP. The cost for the organization will be the same whether the POP is in their county or another county within their LATA.

The proposed concept has DS3 or OC3 connections within each LATA. Why do you believe that is sufficient capacity?

The majority of an organization's traffic will be intraLATA. During Phase I of net.work.Maryland, we will be able to monitor and sample the cross-LATA traffic and make usage and bandwidth projections. This will allow us to identify and document requirements. This will make it possible to determine what additional capability is required within each region.

The proposal for Phase I provides a scalable solution. As needs increase, we can easily expand the capacity without losing the investment the State has already made.

How will net.work.Maryland benefit economic development?

This is a question that needs to be clarified further. The initial documents specified that the high-speed statewide network would contribute to economic development; however, it was not clearly specified how the network would do this. Thus, there were wide and varied interpretations.

Due to laws that prohibit the state from competing with the private sector, net.work.Maryland will not provide direct access

to the private sector. Economic development may benefit as a result of the following:

- (1) All areas throughout the state will have access to a statewide telecommunications infrastructure. For example, remote areas of the state may be viewed as more desirable because the library and education facilities have better telecommunications access.
- (2) Due to increased access in areas by the public sector served by net.work.Maryland, many of the private carriers may see incentives to provide better services at affordable prices to private sector interests.